
PART I - ADMINISTRATIVE

Section 1. General administrative information

Title of project

Protect And Restore The North Lochsa Face Analysis Area Watersheds

BPA project number: 20084

Contract renewal date (mm/yyyy):

☐ Multiple actions?

Business name of agency, institution or organization requesting funding

Nez Perce Tribal Fisheries/Watershed Program

Business acronym (if appropriate)

NPT

Proposal contact person or principal investigator:

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NPPC Program Measure Number(s) which this project addresses

Section 7.1 - Ensuring Biodiversity;

Section 7.6 - Habitat Goals, Policies, and Objectives;

Section 7.7 - Cooperative Habitat Protection and Improvement with Private Landowners; Section 7.8 - Implement State, Federal, and Tribal Habitat Improvements.

FWS/NMFS Biological Opinion Number(s) which this project addresses

Land and Resource Management Plans for National Forests Bureau of Land Management Resource Areas in the Upper Columbia Basins and Snake River Basin Evolutionarily Significant Units, 1998.

Other planning document references

BPA. 1997. Watershed Management Program: Final Environmental Impact Statement.

Clearwater National Forest (CNF) and Nez Perce Tribe (NPT). 1997. Challenge Cost-Share Agreement between the CNF and the NPT. Lapwai, ID.

Columbia Basin Fish and Wildlife Authority (CBFWA). 1997. Integrated Watershed Projects: The Process and Criteria for Selecting Watershed Projects for the Columbia Basin Fish and Wildlife Program.

Northwest Power Planning Council (NPPC). 1994. Columbia River Fish and Wildlife Program. Portland, OR.

CRITFC. 1995. WY-KAN-USH-MI WA-KISH-WIT, Spirit of the Salmon. Vol. I and II Portland, OR.

Short description

Protecting and restoring the North Lochsa Face Watershed to increase anadromous fish populations is the overall goal of this project. We will achieve this working within an overall watershed approach, based on comprehensive studies of the analysis area.

Target species

Spring Chinook Salmon, Steelhead, Bull Trout, and Westslope Cutthroat Trout.

Section 2. Sorting and evaluation

Subbasin

Clearwater Sub-basin

Evaluation Process Sort

CBFWA caucus	Special evaluation process	ISRP project type
Mark one or more caucus	If your project fits either of these processes, mark one or both	Mark one or more categories
<input checked="" type="checkbox"/> Anadromous fish <input type="checkbox"/> Resident fish <input type="checkbox"/> Wildlife	<input type="checkbox"/> Multi-year (milestone-based evaluation) <input checked="" type="checkbox"/> Watershed project evaluation	<input type="checkbox"/> Watershed councils/model watersheds <input type="checkbox"/> Information dissemination <input type="checkbox"/> Operation & maintenance <input type="checkbox"/> New construction <input checked="" type="checkbox"/> Research & monitoring <input checked="" type="checkbox"/> Implementation & management <input type="checkbox"/> Wildlife habitat acquisitions

Section 3. Relationships to other Bonneville projects

Umbrella / sub-proposal relationships. List umbrella project first.

Project #	Project title/description

Other dependent or critically-related projects

Project #	Project title/description	Nature of relationship
968600	Idaho Soil Conservation Commission Focus Watershed Program	The Focus Program is co-coordinated between the NPT and the State of Idaho.
9706000	Nez Perce Tribal Focus Watershed Program	The Focus Program is co-coordinated between the NPT and the State of Idaho.
8335000	Nez Perce Tribal Hatchery	Watershed Protection and Restoration for Anadromous and Resident Fish.
9809802	Salmon Supplementation in Idaho Rivers	Protect and restore watersheds for anadromous and resident fish habitat.

9607707	Focus Watershed Coordinator	was in umbrella table
9607709	Protect and Restore the Squaw to Papoose Creek Watersheds	was in umbrella table
9901700	Protecting and Restoring Lapwai Creek Watershed	was in umbrella table
9607708	Protecting and Restoring Lolo Creek Watershed	was in umbrella table
9901700	Protecting and Restoring Lolo Creek Watershed	was in umbrella table
9901600	Rehabilitation of Big Canyon Creek	was in umbrella table
9607711	Restoring McComas Meadows - Meadow Creek	was in umbrella table
20085	Analyse and Improve Fish Screens	was in umbrella table
20087	Protection of Mill Creek	was in umbrella table
20086	Rehabilitation of Newsome Creek	was in umbrella table

Section 4. Objectives, tasks and schedules

Past accomplishments

Year	Accomplishment	Met biological objectives?

Objectives and tasks

Obj 1,2,3	Objective	Task a,b,c	Task
1	Alleviate sediment input and potential from road sources.	a	Consult, update, and finalize the Cost-Share Agreement between the Nez Perce Tribe (NPT) and the Clearwater National Forest (CNF) on watershed restoration.
		b	Consult with the CNF on identifying 20 miles of road for survey inventory and 10 miles of road for obliteration.
		c	Perform all pre-work needs, training, and logistics internally and with the CNF.
		d	Consult with the CNF on any necessary environmental analysis - Categorical Exclusion.
		e	Survey 20 miles of road.
		f	Obliterate 10 miles of road and provide erosion control on all disturbed areas.
2	Develop a monitoring and evaluation program of road obliteration overall success.	a	Gather watershed and stream survey information.
		b	Develop a long-term program on the effects of road obliteration on the affected watersheds over time.

3	Transfer of project information to all obligatory agencies and interested organizations or parties.	a	Perform quarterly reports on project progress as they become due.
		b	Complete final end of the year report of project.
		c	Perform necessary presentations to the public and project peers.

Objective schedules and costs

Obj #	Start date mm/yyyy	End date mm/yyyy	Measureable biological objective(s)	Milestone	FY2000 Cost %
1	1/2000	10/2000	N/A	X	87.00%
2	9/2000	11/2000	N/A	X	7.35%
3	3/2000	12/2000	N/A	N/A	5.65%
				Total	100.00%

Schedule constraints

Existing schedules for the 2000 budget year may change due to weather conditions. All on-the-ground projects occur in mountainous areas at elevations up to 5000 feet above sea level, where unpredictable weather patterns may occur.

Completion date

A five-year plan (2000-2005) is to be developed for watershed restoration within analysis area.

Section 5. Budget

FY99 project budget (BPA obligated): \$0

FY2000 budget by line item

Item	Note	% of total	FY2000
Personnel		% 25	50370
Fringe benefits		% 4	7948
Supplies, materials, non-expendable property		% 1	1520
Operations & maintenance		% 0	
Capital acquisitions or improvements (e.g. land, buildings, major equip.)		% 0	
NEPA costs		% 0	
Construction-related support		% 0	
PIT tags	# of tags:	% 0	
Travel		% 7	13,896
Indirect costs		% 10	20,828
Subcontractor		% 45	93,000
Other	Vehicle Costs	% 8	17,220

TOTAL BPA FY2000 BUDGET REQUEST	\$204,782
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Cost sharing

Organization	Item or service provided	% total project cost (incl. BPA)	Amount (\$)
Clearwater National Forest	Planning, road identification, technical support, onsite contract administration, obliteration of additional miles of roads, continuation of flood damage restoration.	%49	200,000
		%0	
		%0	
		%0	
Total project cost (including BPA portion)			\$404,782

Outyear costs

	FY2001	FY02	FY03	FY04
Total budget	\$248,552	\$285,835	\$328,710	\$65,000

Section 6. References

Watershed?	Reference
<input type="checkbox"/>	Clearwater National Forest. 1998. North Lochsa Face Biological Assessment (Draft). Lochsa Ranger District.
<input type="checkbox"/>	Clearwater National Forest. 1997. North Lochsa Face, Environmental Impact Statement (Draft). Lochsa Ranger District. Idaho County, Idaho.
<input type="checkbox"/>	Columbia River Inter-Tribal Fish Commission. 1995. WY-KAN-USH-MI-WA-KISH-WIT, Spirit of the Salmon. The Columbia River Anadromous Fish Restoration Plan of the Nez Perce, Umatilla, Warm Springs, and Yakama Tribes. Volume I and II. Portland, OR.
<input type="checkbox"/>	McClelland, et al. 1997. Assessment of the 1995 & 1996 Floods and Landslides on the Clearwater National Forest. Part 1: Landslide Assessment. Northern Region United States Forest Service. Missoula, MT.
<input type="checkbox"/>	Nez Perce Treaty of 1855 with the United States Government.
<input type="checkbox"/>	Northwest Power Planning Council (NPPC). 1994. Columbia River Basin Fish and Wildlife Program. Portland, OR.
<input type="checkbox"/>	United States Department of Agriculture (USDA). 1997. National Indian Forest Resource Management Act. Public Law 101-630.

PART II - NARRATIVE

Section 7. Abstract

Protecting and restoring the North Lochsa Face analysis area watersheds using an overall watershed approach, to assist in increasing anadromous fish populations, is the overall goal of this project. This project works toward achieving the goals and objectives of the *Columbia River Basin Fish and Wildlife Program* and the *Spirit of the Salmon Anadromous Fish Restoration Plan of the Tribes*. Alleviating

sediment input and potential from road sources has been determined a high priority. We will address this by surveying and obliterating roads that are presently or show potential for adding sediment into streams and tributaries important to anadromous fish. A road survey will be completed using the Watershed Improvement Needs (WIN) inventory, such that the survey information needed for road obliteration is gathered along with other watershed problems. Road obliteration practices vary depending on stability, and generally entail removing culverts and restoring natural drainage patterns, reshaping unstable fill and cut banks to their natural slopes, and performing erosion control on all disturbed surfaces. A monitoring and evaluation program will be developed to measure road obliteration success in terms of overall watershed and ecosystem health. Lastly, project progress and information will be made available to obligatory and interested organizations and parties through quarterly reports, end of the year reports, and presentations. The expected outcome of our work is to decrease the potential for mass failure and reduce surface erosion from road related sources. This reduction in sediment will allow these watersheds and their streams and tributaries to heal with time to their proper functioning condition, increase available fish spawning and rearing habitat, assist in enlarging their populations, and protect Nez Perce Tribal resources and cultural values.

Section 8. Project description

a. Technical and/or scientific background

The North Lochsa Face analysis area covers approximately 128,000 acres of mostly forested, steep mountains, draining into the Lochsa River of the Clearwater Sub-basin in Northern Idaho. The Lochsa Ranger District boundary and the Lolo Motorway form the Northeast and northern boundary of the analysis area. The Pete King Creek drainage forms the southwest boundary. US Highway 12 and the Lochsa River, designated wild and scenic, form the south/southwest boundary up to Fish Creek, and the remaining boundary is the eastern watershed divided of Fish Creek. The watersheds and streams that encompass the analysis area include; Pete King, Rye Patch, Canyon, Apgar, Glade, Deadman, Bimerick, and Fish. Steelhead and cutthroat trout are found in all listed streams (except Apgar), with Fish Creek having the largest wild steelhead population in the Lochsa Drainage. In most recent years, some natural Spring Chinook Salmon production has most likely occurred within Fish Creek and Pete King Creek (CNF, 1997).

The North Lochsa Face analysis area watersheds are extremely important to the Nez Perce Tribe for their fisheries, cultural, and traditional values. The main goals of this project are (1) to protect and restore the North Lochsa Face watersheds, so they can return to their proper functioning condition, producing a healthy environment for fish, and (2) protect Nez Perce Tribal resources and cultural values. This will be accomplished using an overall watershed approach, based on comprehensive studies of the analysis area, which include, a biological assessment and environmental impact statement.

Sedimentation into streams and tributaries of the North Lochsa Face analysis area has been identified as a limiting factor for increasing anadromous fish populations. Mass wasting, such as debris torrents associated with channels, increased substantially after the large fire in 1943. Large landslide events, mostly related to roads, occurred in the 1970's, 1987, and 1996. These landslides have delivered massive amounts of sediment into streams and tributaries of the North Lochsa Face analysis area creeks. Landslides originating on closed or abandoned roads have been identified as a major cause of

sediment delivery to streams (McClelland et. Al., 1997). Surface erosion has also occurred on breaklands and old surfaces due to fire and management activities within the analysis area. Surface erosion on old surfaces, which is naturally very low, change when skid trails and roads remove surface ash caps. For this reason, old skid trails and roads that remain exposed to rainfall and running water may have severe erosion problems (CNF, 1997). Cobble embeddedness has increased to an average of 38.7% within the analysis area. As a result of this increased sedimentation and cobble embeddedness, spawning habitat has decreased and these low energy systems are slow to remove sediment. Approximately 96.9 miles of road have been identified for road obliteration and 59.8 miles for stabilization as long-term intermittent use roads within the analysis area (CNF, 1998). With the amount of system and non-system roads remaining within the watersheds, the potential for further mass sedimentation, along with surface erosion from these roads, is great.

Putting fish back into river and stream systems alone is not enough to restore their populations, they need a healthy system to return, spawn, and rear in. Our proposal objectives will mitigate (in place, in kind) the problems stated above by decreasing sediment into rivers and streams, which will allow the stream environment to heal and return to their original capacity for spawning and rearing habitat. The goals and objectives of our project proposal strives towards meeting all of the goals and objectives found in the Wy-Kan-Ush-Mi Wa-Kish-Wit (CRITFC, 1995), as stated below:

ANADROMOUS FISH RESTORATION PLAN OF THE TRIBES

GOALS

- Restore anadromous fishes to the rivers and streams that support the historical culture and economic practices of the tribes.
- Emphasize strategies that rely on natural production and healthy river systems to achieve this goal.
- Protect tribal sovereignty and treaty rights.
- Reclaim the anadromous fish resources and the environment on which it depends for future generations.

ANADROMOUS FISH RESTORATION PLAN OF THE TRIBES

OBJECTIVES

- Within 7 years, halt the declining trends in salmon, sturgeon, and lamprey populations originating upstream of Bonneville Dam.
- Within 25 years, increase the total adult salmon returns of stocking originating above Bonneville Dam to 4 million annually and in a manner that sustains natural production to support tribal commercial as well as ceremonial and subsistence harvests.
- Within 25 years, increase sturgeon and lamprey populations to naturally sustainable levels that also support tribal harvest abundance in perpetuity.

The project proposal also protects the goal of tribal sovereignty and treaty rights. In the Treaty of 1855, the Nez Perce Tribe ceded much of their aboriginal territory to the United States in exchange for a reservation that was to serve as a permanent homeland. In that treaty, the Nez Perce Tribe reserved certain rights including, “the exclusive right of taking fish in all the streams running through or bordering said reservations is further secured to said Indians (Nez Perce Treaty, 1855).” According to this, the federal government’s has a trust agreement to protect all tribal resources. The proposal will work toward protecting our resources, therefore fulfilling the government’s responsibilities. The project will also allow the tribe to manage our own tribal resources, which will in turn protect our sovereignty and treaty rights. This is called for in the *National Indian Forest Resource Management Act (PL 101-630)*, which provides for the management of forested tribal trust lands (USDA, 1997).

b. Rationale and significance to Regional Programs

The project will work towards 7.6 Habitat Objective of the *NPPC Fish and Wildlife Program* to limit the percent of fine sediment in salmon and steelhead redds to no more than 20 percent and limit cobble embeddedness (CE) to less than 30 percent or documented historic condition (NPPC, 1994). Mass wasting, such as debris torrents associated with channels, increased substantially after the large fire in 1934. Large landslides events, mostly related to roads, occurred in the 1970's, 1987, and 1996 (CNF, 1997). These landslides have delivered massive amounts of sediment into streams and tributaries of the North Lochsa Face analysis area creeks. Surface erosion has also occurred on breaklands and old surfaces due to fire and management activities within the analysis area. Surface erosion on old surfaces, which is naturally very low, change when skid trails and roads remove surface ash caps. For this reason, old skid trails and roads that remain exposed to rainfall and running water may have severe erosion problems (CNF, 1997). Cobble embeddedness has increased to an average of 38.7% within the analysis area. As a result of this increased sedimentation and cobble embeddedness (CE), spawning habitat has decreased. With the amount of system and non-system roads remaining within the watersheds, along with surface erosion from these roads, the potential for further mass sedimentation is great. Our project proposal will directly aide in decreasing CE within these streams and tributaries by removing roads that are adding sediment or have a high mass failure potential.

Protecting and restoring the North Lochsa Face watersheds is called for in the objectives and goals of the *Spirit of the Salmon Anadromous Fish Restoration Plan of the Nez Perce, Umatilla, Warm Spring, and Yakama Tribes (Volume II)* as stated above in Section 7, Part (a) of this proposal. This plan specifically recommends actions for the Clearwater River System including: (1) Logging, road building and the loss of the riparian vegetation has created high cobble embeddedness. To eliminate or reverse this problem, those practices should be stopped or severely restricted until the streams can recover; (2) Sedimentation due to logging is occurring throughout the watershed. In addition, mining and road building also continue to create sedimentation problems. The watershed must be left to recover by eliminating or severely restricting these practices. This project proposal directly addresses this plan by eliminating system/non-system roads that are presently or have future potential of adding sediment into the North Lochsa Face analysis area streams and tributaries.

The *Idaho Salmon Supplementation Studies* is a project that is funded by BPA and has direct ties to the North Lochsa Face analysis area watersheds. Pete King Creek, within the analysis area, has been apart of this project plan since 1991, when it began, and is projected to year 2007 and possibly 2015. The *Idaho Salmon Supplementation Studies* is a cooperative research project of the Idaho Fish and Game, the NPT, Shoshone-Bannock Tribes, and the U.S. Fish and Wildlife Service to test supplementation on an experimental basis. In order for this project to be successful, habitat conditions for fish need to be as beneficial as possible. Pete King Creek has been negatively impacted by sedimentation due to landslides resulting from roads within the analysis area. Sedimentation is presently occurring and the potential from further mass failures by roads is great. Restoration work proposed by this project targets alleviating the potential for further habitat degradation in these supplementation streams by preventing road-derived damage.

This proposed project will directly help fisheries projects already funded by BPA. BPA has allotted funds to the Nez Perce Fisheries Program to be used towards the *Nez Perce Tribal Hatchery (NPTH)*. Fish Creek, which is within the analysis area, is a NPTH monitoring and evaluation control stream. In order for the production program to achieve success, habitat conditions in the stream need to be as beneficial as possible. The objectives of this proposal will work to benefit fish and wildlife habitat for the NPTH projects.

A *Challenge Cost-Share Agreement* has been developed between the Nez Perce Tribe (NPT) and the Clearwater National Forest (CNF). This agreement discusses the relationship between the two governments with regard to watershed work, planning, and management within the entire CNF. This agreement was developed in 1997, and used in 1997 and 1998 to obliterate 9 and 12 miles within the Squaw to Papoose Creek watersheds and 10 and 12 miles within the Lolo Creek watersheds, respectively. Because of the great success of this agreement, it will be updated and used in the same manner for work in 2000 for the North Lochsa Face analysis area watershed work. A verbal agreement has already been made

with the CNF concerning this matter, with a memorandum of understanding to be established before the season begins. With regards to road obliteration, according the agreement, the CNF will pay for all administrative support (planning, road obliteration prioritization, contract administration, etc.), provide for the obliteration of additional miles, and continue funding of identified flood damage. The Nez Perce Tribe will provide funding for the excavator and operator, materials, and erosion control supplies. Under this agreement in 1998, Emmitt E. Taylor Jr. (Civil EIT) from the NPT Fisheries/Watershed Program was trained as a road obliteration inspector and a three member erosion control crew was also provided by the tribe. Mr. Taylor and the erosion control crew will be utilized for this project in 2000.

c. Relationships to other projects

The *Idaho Salmon Supplementation Studies* is a project that is funded by BPA and has direct ties to the North Lochsa Face analysis area watersheds. Pete King Creek, within the analysis area, has been apart of this project plan since 1991, when it began, and is projected to year 2007 and possibly 2015. The *Idaho Salmon Supplementation Studies* is a cooperative research project of the Idaho Fish and Game, the NPT, Shoshone-Bannock Tribes, and the U.S. Fish and Wildlife Service to test supplementation on an experimental basis. In order for this project to be successful, habitat conditions for fish need to be as beneficial as possible. Pete King Creek has been negatively impacted by sedimentation due to landslides resulting from roads within the analysis area. Sedimentation is presently occurring and the potential from further landslides by roads is great. Restoration work proposed by this project targets alleviating the potential for further habitat degradation in these supplementation streams by preventing road-derived damage.

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d. Project history (for ongoing projects)

A *Challenge Cost-Share Agreement* has been developed between the Nez Perce Tribe (NPT) and the Clearwater National Forest (CNF). This agreement discusses the relationship between the two governments with regard to watershed work, planning, and management within the entire CNF. This agreement was developed in 1997, and used in 1997 and 1998 to obliterate 9 and 12 miles within the Squaw to Papoose Creek watersheds and 10 and 12 miles within the Lolo Creek watersheds, respectively. Because of the great success of this agreement, it will be updated and used in the same manner for work in 2000 for the North Lochsa Face analysis area watershed work. A verbal agreement has already been made with the CNF concerning this matter, with a memorandum of understanding to be established before the

season begins. With regards to road obliteration, according the agreement, the CNF will pay for all administrative support (planning, road obliteration prioritization, contract administration, etc.), provide for the obliteration of additional miles, and continue funding of identified flood damage. The Nez Perce Tribe will provide funding for the excavator and operator, materials, and erosion control supplies. Under this agreement in 1998, Emmitt E. Taylor Jr. (Civil EIT) from the NPT Fisheries/Watershed Program was trained as a road obliteration inspector and a three member erosion control crew was also provided by the tribe. Mr. Taylor and the erosion control crew will be utilized for this project in 2000.

e. Proposal objectives

OBJECTIVE 1: Alleviate sediment input and potential from road sources.

Product:

- Updated, finalized Challenge Cost-Share Agreement to be used for restoration work within the North Lochsa Face watersheds between the Nez Perce Tribe and the Clearwater National Forest.
- Twenty miles of system/non-system roads surveyed. These surveys will be used to determine road characteristics and the level of obliteration needed for long-term stability.
- Ten miles of system/non-system roads obliterated. The obliteration will stabilize roads, reducing the high risk of mass failures and surface erosion.

OBJECTIVE 2: Develop a monitoring and evaluation (M&E) program of road obliteration overall success.

Product:

- A M&E program and report that includes but not limited to; history of road obliteration in the North Lochsa Face watersheds; future obliteration, and; an analysis of sediment loads, cobble embeddedness, and overall water quality over time. This will work towards a multi-year M&E program to measure overall success.

OBJECTIVE 3: Transfer of project information to all obligatory agencies and interested organizations and parties.

Product:

- Four quarterly reports on project progress as they become due.
- End of the year final report.
- Necessary presentations to the public and project peers.

f. Methods

OBJECTIVE 1

Objective 1 and the related tasks, as stated in section four of this proposal, will be accomplished by using a *Challenge Cost-Share Agreement* (between the Nez Perce Tribe and the Clearwater National Forest) as a tool in surveying twenty miles and obliterating ten miles of system/non-system roads and providing erosion control on all disturbed areas. The *Challenge Cost-Share Agreement* will be updated, finalized, and used to complete the proposed work.

The *Challenge Cost-Share Agreement* discusses the relationship between the two governments with regard to watershed work, planning, and management with the CNF. This agreement will be used for this project in the same manner it is used in the *Squaw to Papoose Creek Watersheds Project*. According to the agreement, the CNF will provide planning, technical support and onsite contract administration. This includes the identification and prioritization of roads that are no longer needed on the forest transportation system and are presently or have the potential for mass wasting or adding sediment into creeks from surface erosion. In addition, the CNF will provide for the obliteration of additional miles of road and continue to fund restoration of identified flood damage throughout the watersheds. Under the agreement, the tribe will provide funding for the excavator and operator, and purchase of erosion control supplies. The Tribal Fisheries/Watershed Program will also provide the inspector(s), erosion control crew(s), and survey team to provide on-the-ground work. The Tribal Fisheries/Watershed Program and the CNF will also work

cooperatively on a monitoring and evaluation programs of road obliteration practices and overall measure of success over time.

Upon completion of road identification and prioritization by the CNF, road survey identification will begin. The survey will use the Watershed Improvement Needs (WIN) inventory, which has been adopted by the CNF. This survey gathers information needed for road obliteration, along with other watershed problems in a log format. Data collection includes; beginning point of survey, distance between sites, inlet and outlet of drainage structures, depth of fill, width of the road, length of any through fills, lengths and widths of failing and failed areas, any potential access problems, and total length of the road. Distances are generally measured using a hip chain but may also be estimated, wheeled from a map, or picked off the odometer of an all terrain vehicle or truck. In addition, any tributary roads are also logged. Overall problems associated with the roads are identified and the road is recommended for abandonment or obliteration. Road obliteration coordinators then use this information to determine the level of obliteration needed, and estimate the volume of fill at risk of failing. Upon completion of this process, all involved parties meet and finalize road obliteration decisions (Connor and Bradbury, 1998).

Road obliteration practices vary depending on the history of slides and other erosion problems associated with the road, the land type the road is on, and its proximity to fish bearing streams. Most roads require combinations of practices associated with the four road obliteration levels.

- Level 1 Obliteration: Roads have shallow culverts with few large road fills, on gentle terrain with few stream crossings. Practices used to obliterate these roads include: (1) Road surface de-compaction or scarification; (2) removal of culverts; (3) minor out-sloping or cross draining; (4) full raconteur or earth barrier at road approach to prevent motorized access; (5) re-vegetation of disturbed soils using native planting in combination with mulching and fertilizer.
- Level 2 Obliteration: Roads have a mix of shallow and deeper culverts and larger fills on moderate terrain with some stream crossings. These roads may also have small bogs or seeps that may threaten fill-slope stability. Practices to obliterate these roads typically include all practices described for level 1 obliteration plus: (1) removing fills at risk of failure; (2) Obvious or frequent out-sloping and cross draining.
- Level 3 Obliteration: Roads have numerous deep culverts and larger fills on steep terrain with many stream crossings. These roads often have small bogs or seeps that may threaten fill-slope stability. Practices to obliterate these roads typically include all practices described for level 1 and 2 obliteration plus: (1) removal of all deep culverts and associated fills; (2) fill removal and slope restoration to near original contours as possible on slopes at risk.
- Level 4 Obliteration: Conditions along these roads vary widely. They may occur on extremely steep terrain with numerous, deep culverts. They may also occur within degraded riparian habitats within 300 feet of fish bearing streams. These roads represent direct and often chronic risk of degrading fish habitat and water quality. These roads are obliterated by completely removing the fill and restoring slopes to as near natural contours as feasible.

OBJECTIVE 2

Objective 2 and the related tasks, as stated in section four of this proposal, is a M&E program that will measure road obliteration success over time. The cleaning and flushing of excess sediment loads through streams and tributaries is a long-term process with many variables, and for this reason, this program is going to take place over several years. The project will begin by determining what data is available, what is needed, and establish a protocol. In 2000, data gathering will continue and an analysis will begin.

OBJECTIVE 3

Objective 3 and the related tasks will be performed to relay project progress and information to obligatory and interested organizations or parties. Quarterly and end of the year reports will be made available as they become due and completed using the format provided by BPA. Project presentations will be performed to peers and the public, as they become necessary.

g. Facilities and equipment

Activities for this project will be based out of the Fisheries/Watershed Program of the Nez Perce Tribe. The program is equipped with computers and all necessary equipment to perform all in-house tasks. Vehicles for the program are leased through GSA. Four vehicles will be provided for hauling equipment and employees. The program currently owns a four-wheeler and is in the process of purchasing a six-wheeler, which will be made available for this project. The program also has hard hats, field vest available, etc., with only a few smaller items will be purchased with this proposal. The operator/excavator will be sub-contracted through the Clearwater National Forest's contract department.

h. Budget

PERSONNEL: Salaries have been calculated using the pay schedule for the Nez Perce Tribe, and are based on estimated time frames to complete the proposed work per objective. The road survey inventory crew will consist of three employees, the project leader, a technician II, and a technician I. From past experience, it is expected for this crew to need 3 weeks to complete this work. The road obliteration crew will consist of six employees to include; project leader (inspector), technician III (inspector), 2 technician II (erosion control), 2 technician I (erosion control), and 2 aides (erosion control). It has been estimated to take 8 weeks to complete the proposed road obliteration work. The project leader, and the technician III will primarily complete all consulting with the Clearwater National Forest (CNF), objective 2, 3, and 4.

FRINGE BENEFITS: Fringe benefits are calculated using the Nez Perce Tribal standards. Fringe benefits equal 14% of tax-exempt employees (tribal) and 24 % of non-tax exempt employees (non-tribal).

SUPPLIES, MATERIALS, NON-EXPENDABLE PROPERTY: All costs are estimated on the amount of proposed work and past experience on what will be need to complete the job. Most of the field supplies, and the program already owns materials. This category included all in-house and field needs.

TRAVEL: The project area is approximately 120 miles from the main office in Lapwai, ID. This section covers lodging costs and field per diem for all training and on-the-ground work.

INDIRECT COSTS: Indirect costs are based on Nez Perce Tribal standards. This cost equals 22.9% of personnel, travel, vehicles, and supplies and materials.

SUBCONTRACTOR: This section includes the cost for excavator rental/operator and erosion control supplies. Excavator/operator costs are based on current going rates (with a small inflation increase) and the amount of time it is expected to complete the proposed miles in the given terrain and level of obliteration. Erosion control supplies are based per mile to include mainly, erosion control blankets, seed, fertilizer, and staples.

OTHER (VEHICLE COSTS): This cost includes four vehicles to be leased from GSA and estimated costs for vehicle and ATV's repairs and service. Four vehicles will be needed to transport employees, ATV's, supplies, and materials.

Section 9. Key personnel

Emmit E. Taylor Jr.
Civil Engineer-In-Training
Nez Perce Tribal Watershed Program
1.0 FTE

Education: 1995 – BS in Civil Engineering – Colorado State University, CO

Current Responsibilities: Assist in gathering, analyzing, and interpreting watershed data; represent program in various inter-disciplinary teams; assist in surveying project areas; aide in assessing water

resources/quality; knowledge of current computer software programs; design of civil engineering projects; supervise and field inspection of road obliteration; co-coordinate program projects.

Relevant Training:

- Riparian Proper Functioning Condition Training, 1998, Bureau of Land Mgmt.
- Road Obliteration Training, 1998, USDA Forest Service
- Applied Fluvial Geomorphology, 1998, Wildland Hydrology
- AutoCAD R14 Fundamentals, 1998, PacifiCAD Inc.

Duties on Project: Mr. Taylor will be the project leader for all activities of this proposal. As project leader, he will manage all road survey and road obliteration on-the-ground activities. He will be responsible for coordinating time schedules, project budget, crew members, and all activities with the Clearwater National Forest (CNF). Mr. Taylor will be a road obliteration inspector on the project and oversee all erosion control work. His duties will also include working with the CNF on a monitoring and evaluation programs and project information dissemination (quarterly reports, end of the year reports, presentations, etc.)

Previous Employment:

- August 1997 – present: *Nez Perce Tribal Fisheries/Watershed*
Civil Engineer-In-Training
- October 1995 – August 1997: *Womer and Associates Engineering and*
Architecture Firm
Civil Engineer-In-Training
- May 1993 – October 1995: *Colorado State University Tribal*
Tribal Transportation Program
Engineering Aide

Expertise: Emmet E. Taylor Jr.'s background is in Civil Engineering with an emphasis in hydrology. Mr. Taylor's analysis, design, and construction work concentrates on stream rehabilitation, stream morphology, water quality, road obliteration, in-stream structures, and fish passage improvements.

Relevant Job Completions:

1) Project leader and inspector of 24 miles of road obliteration, 2) Eldorado Falls Area Survey, 3) Squaw Creek Stream Survey and Analysis, 4) Colville Confederated Tribes HRD Building Site Development Design, and 5) Geiger Boulevard Environmental Analysis.

Ira Jones

Clearwater Sub-basin Focus Coordinator

Habitat/Watershed Manager

1.0 FTE

Education: University of Montana, Missoula, MT

Major: Wildlife

Attendance: September 1973- June 1974

Current Responsibilities: Planning and implementation of Early Action Watershed Projects, analyze programs, laws, policies related to watershed management, facilitate development of criteria to identify critical fisheries habitat, develop a system to apply criteria to watershed for project development and administration, prepare and plan documents for watershed habitat coordination, provide educational presentation and workshops for watershed management and proposal development, and provide assistance to project proponents with proposal development, implementation, monitoring and assessment.

Duties on Project: Mr. Jones will facilitate all activities with the Clearwater National Forest on the Challenge Cost-Share Agreement, which includes analyzing the laws and policies. Mr. Jones will oversee all project tasks for completion and quality of work.

Previous Employment:

- March 1997 – present: *Nez Perce Tribal Fisheries/Watershed Habitat/Watershed Manager*
- June 1986 – March 1997: *United States Forest Service, Region 1 Tribal Government Program Manager*
- December 1980 – June 1986: *United States Forest Service, Region 1 Facilities Manager*
- July 1974- October 1979: *United States Forest Service, Region 1 Fire Cache Work Leader*

Relevant Job Completion:

1) Coordinated National, Multi-Regional, and Regional Civil Rights Conferences, 2) Facilitated treaty rights workshops with host tribes and multi-governmental agencies, 3) Organized and conducted Tribal Relations Training primarily for management level from the U.S. Forest Service, Tribes, Bureau of Land Management, and bureau of Indian Affairs, 4) Introduced, implemented, and managed the Inter-tribal Youth Practicums for career in natural resources and leadership within the Forest Service Regions 1, 5, 9, and 10. 5) Developed an intergovernmental Personnel Act (IPA) position to work with the Salish Kootenai College to teach environmental science courses and develop a four-year natural science curriculum at the college. This three-year position and the program developed into a four-year accredited degree program in the fall of 1996.

Felix M. McGowan
Nez Perce Tribal Watershed Coordinator
1.0 FTE

Education: 1994 – BA in Biology – Gonzaga University, Spokane, WA

Current Responsibilities: Coordinate all activities within the Nez Perce Fisheries, wildlife, water resources, and cultural resources. These activities are to include habitat, research, and production as it relates to watershed management, coordinate with cooperating agencies, work with interdisciplinary teams, inventory and evaluate habitat conditions, and coordinate riparian protection and restoration efforts.

Relevant Training:

- Riparian Proper Functioning Condition Training, 1998, Bureau of Land Mgmt.
- Integrated Ecosystem Watershed Management Workshop, 1998, OSU
- Road Obliteration Training, 1998, USDA Forest Service
- Introduction to GIS with ArcView 3.0a. 1998, BIA
- Applied Fluvial Geomorphology, 1998, Wildland Hydrology
- Coldwater Fish Culture, 1998, U.S. Fish & Wildlife Service

Duties on Project: Mr. McGowan will be an inspector in this project. This will include inspecting and supervising an excavator/operator, managing and inspecting an erosion control crew, and determining on-the-ground level of obliteration. Mr. McGowan will also assist the project leader (Emmit E. Taylor Jr.) in project reports, presentations, and coordination between the Clearwater National Forest (CNF).

Previous Employment:

- May 1997 – present: *Nez Perce Tribal Fisheries/Watershed*
Nez Perce Watershed Coordinator
- August 1994 – April 1997: *North Idaho College*
Multicultural Academic Advisor

Expertise:

- Felix has a broad educational base in the natural sciences that allows an understanding of different natural processes. The training he has received over the past year has greatly increased his understanding in fisheries and hydrological sciences. These are two of the most important sciences involved in watershed work.

Relevant Job Completions:

1) Squaw Creek Stream Survey, 2) Squaw Creek Road Obliteration, 3) Lapwai Creek Watershed Assessment, 4) Johnson Creek Restoration Review, and 5) Big Canyon Creek Watershed Assessment.

Section 10. Information/technology transfer

Quarterly reports will be assembled stating, but not limited to, project status, time lines, dollars spent, and problems that need to be addressed during the coming quarter. The end of the year report will compile all data from the quarterly reports determining accomplishments achieved during the previous work season and what information, both negative and positive, can be applied to the upcoming season. Both quarterly and end of the year reports will be formatted by BPA standards. These reports will be made available to all obligatory and interested organization and parties. Presentations will also be performed to the public and project peers.

The forest service has a required obligation to provide research, transfer of technology, and technical assistance to Indian tribal governments (USDA, 1997). This obligation by the forest service will be used by the *Nez Perce Tribal Fisheries/Watershed Program* to aide in accomplishing the goals and objectives of our Program, NPPC Fish and Wildlife Program, and Spirit of the Salmon Anadromous Fish Restoration Plan of the Tribes. A relationship with the Clearwater National Forest has been established and has had a very positive impact on both organizations and is expected to continue in the future. This relationship has lead to several agreements, both verbal and written, for the completion of numerous projects within the Clearwater Sub-basin.

A verbal agreement (to be included in a memorandum of understanding at a later date) has been made with the Clearwater National Forest to assist Emmitt E. Taylor Jr. (Civil Engr., EIT) in obtaining his professional engineering license. The forest service engineers will oversee Mr. Taylor's designs and the implementation of these designs. During the next 3 years he will seek qualifications to take the State of Idaho Professional Engineer License Exam.

Congratulations!